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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,980	07/05/2003	Michael D. Doyle	001-2-2	4346

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EXAMINER

BOTTS, MICHAEL K

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,980

Applicant(s)

DOYLE, MICHAEL D.

Examiner

Michael K. Botts

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2003 and 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 05 July 2003 is/are: a) ☒ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/3/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This document is the first Office Action on the merits. This action is responsive to the following communications:
 - a) A Non-provisional Patent Application, filed July 5, 2003, which was amended by a Preliminary Amendment filed therewith;
 - b) a Preliminary Amendment, filed July 5, 2003, that amended the Specification by adding a cross reference to related applications, and that amended the claims by canceling original claims 1-9, and replacing them with new claim 10; and,
 - c) a Supplemental Preliminary Amendment, filed April 5, 2004, amending claim 10.
2. The specifications are objected to.
3. The abstract of the disclosure is objected to.
4. The title is objected to.
5. A double patenting rejection is made.
6. Claim 10 has been examined. Claim 10 is an independent claim.
7. Claim 10 is objected to.
8. Claim 10 is rejected.

The Specification

9. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.

The application contains two computer program listings. The first listing runs from page 9, line 27 through page 39 and comprises roughly 190 lines of code. A computer listing containing 300 lines of code or fewer may be submitted either as a drawing or as part of the specification. See, 37 CFR 1.96(b). If the code is submitted as a part of the specification and exceeds 60 lines of code, it must be positioned at the end of the description but before the claims. See, 37 CFR 1.96(b)(2)(ii). The first computer listing does not appear in the proper place in the specification.

The second computer program listing runs from page 13 through page 23 and runs greatly in excess of 300 lines of code. Any computer program listing having over 300 lines of code must be submitted on a compact disc conforming to the standards set forth in 37 CFR 1.96(c) and must be appropriately referenced in the specification. See, 37 CFR 1.77(b)(4).

Appropriate correction is required.

The Abstract

10. The abstract of the disclosure is objected to because it incorrectly identifies the invention as being a "method and apparatus." The application claims an apparatus only.

The abstract is also objected to because it repeats information given in the title. See, MPEP 608.01(b)(C). The title states: "Method and apparatus for identifying features of multidimensional image data in hypermedia systems," which language also appears as the first part of the abstract.

The abstract is further objected to because it does not sufficiently describe the disclosure to assist readers in deciding whether there is a need for consulting the full patent text for details. See, MPEP 608.01(b)(C).

Appropriate correction is required.

The Title

11. The title is objected to because it incorrectly identifies the invention as being a "method and apparatus." The application claims an apparatus only.

Appropriate correction is required.

Claim Objections

12. **Independent claim 10** is objected to because of the following informalities:

- a) at line 1, the parenthetical "(Currently Amended)" must be deleted.
- b) at line 9, after the word "clip" is a comma that is believed to have been intended to be a semicolon to indicate separation of independent clauses;
- c) at line 13, the word "determines" is believed to have been intended to be the singular "determine";
- d) at line 18, the word "vales" is believed to have been intended to be the word "values."

In the interest of compact prosecution, claim 10 will be read as indicated above.

Appropriate clarification or correction is required.

Double Patenting Rejection

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See, 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Independent Claim 10 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,616,701. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would be obvious to put the program of claim 1 on a disk. The Examiner takes official notice of the fact that method steps that are performed by a computer are stored on computer disks. It would be obvious to one of ordinary skill

in the art at the time of the invention to be store the patented method steps on a disk for purposes of archiving, sale, transportation, etc.

Claim Rejections, 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Independent claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 appears to contains what are essentially two preambles, the first ending with "comprising:" and the second ending with "further comprising:" as follows:

A computer program product, executed by a digital processor, for associating specified program actions with locations in images viewed on a computer system, the computer program product comprising:

a computer usable medium having computer readable program code physically embodied therein, said computer program product further comprising:

This terminology is confusing as to whether the invention claimed is "a computer program product, executed by a digital process," i.e. software, or whether the invention claimed is "a computer program product comprising a computer usable medium," i.e. hardware such as a computer disk, or whether both are claimed. It is believed that the invention claimed is the "computer program product" software for operating a computer only because the claim specifies "computer readable program code" throughout. It is further believed that the claim is limited to the "computer program product" software

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recorded on a "computer useable medium," which would reasonably include a computer disc or computer memory. Accordingly, to clarify the invention consistent with the Office's belief of the applicant's intent, it is suggested that the preamble and claim be amended to state as follows:

A computer program product recorded onto a computer usable medium, having computer readable program code physically embodied thereon, that is capable of being executed by a digital processor for associating specified program actions with locations in images viewed on a computer system, the computer program product comprising:

computer readable program code for causing the digital processor to display . . .;

[finish with existing claim language to the end of claim 10].

For the purposes of this examination, the examiner will read claim 10 as indicated in the above discussion. Appropriate correction is required.

Claims Rejection, 35 U.S.C. 102(e)

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claim 10 is rejected under 35 U.S.C. 102(e) as being unpatentable over Wistendahl, et al. (U.S. Patent 5,708,845 [hereinafter "Wistendahl]).

Regarding **independent claim 10**, Wistendahl teaches:

A computer program product, executed by a digital processor, for associating specified program actions with locations in images viewed on a computer system, the computer program product comprising:

a computer usable medium having computer readable program code physically embodied therein, said computer program product further comprising:

a computer readable program code for causing the digital processor to display a two-dimensional representation of a multi-dimensional image on a computer screen, with locations in the two-dimensional image specified by values of first and second coordinates which are x and y coordinates specifying locations in a single frame of a video clip,

(See, Wistendahl, col. 5, lines 23-35: "In a basic implementation of the invention, as illustrated in FIG. 1, original media content 10, such as a movie, video program, or live television program captured by a video camera, etc., is digitized via an analog-to-digital (A/D) converter 12 into digital data representing a series of display frames F_i , F_{i+2} , F_{i+3} , . . . , [sic.] in a time sequence t for display on a display screen. Each frame F has a frame address i , $i+1$, $i+2$, . . . corresponding to its unique time position in the sequence, and is composed of an array of pixels p_i uniquely defined by location coordinates

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represented by j rows and k columns in the display area of each frame. The pixels of the frame are also digitally defined with chrominance and luminance values representing their color and brightness levels on the display."

In addition, it is noted that the two-dimensional display of three-dimensional computer objects was well known by one of ordinary skill in the art at the time of the invention. See, e.g., Lathrop, et al. (U.S. Patent 5,096,427) at col. 2, lines 4-18: "Because the basis of adding texture to three dimensional surfaces is a mapping operation, texture mapping involves a transformation from one coordinate system to another. In Particular [sic.], these coordinate systems can be referred to as texture space, object space, and image space. The texture pattern is defined in a two-dimensional coordinate system (u, v) in texture space, the three-dimensional surface is defined in a three-dimensional coordinate system (x', y', z') in object space and the output display screen is defined in a two-dimensional coordinate system (x, y) in image space. Thus, conceptually, texture mapping transforms a texture plane, (u, v) onto a three dimensional surface, (x', y', z') , and then projects the transformed texture plane into the output display screen coordinate system (x, y) ."

computer readable program code for causing the digital processor to select a particular location on the two-dimensional representation having particular values of the first and second coordinates which determines a multi-dimensional coordinate including at least a third coordinate value which is a time dimensions of the video clip, [sic.]

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(See, Wistendahl, Figure 1 and col. 5, lines 28-35: "Each frame F has a frame address $i, i+1, i+2, \dots$ corresponding to its unique time position in the sequence, and is composed of an array of pixels p_i uniquely defined by location coordinates represented by j rows and k columns in the display area of each frame." See also, Wistendahl, col. 6, lines 22-31: "The N Data defining the hot spots are preferably in a format that may become established in the industry for handling the frame addresses and display location coordinates for the designated objects, as explained further herein. The standard-format N Data can thus be accessed by any interactive digital media (IDM) program written in standard applications programming languages. In accordance with the invention, the N Data define the location of the designated 'hot spots' or 'anchors' to which hyperlinks are established in the IDM program.")

computer readable program code for causing the digital processor to read a secondary image map, having entries correlating to values of the first, second, and third coordinates, with each entry holding a pointer value;

(See, Wistendahl, col. 6, lines 34-39: "Then when a user clicks on a designated 'hot spot' by pointing to any display position encompassed within the area defined by the object mapping data, the IDM program recognizes that the object pointed to has been selected, and consequently causes the other file or function linked to the 'hot spot' to be performed.")

computer readable program code for causing the digital processor to access a selected entry of the secondary image specified by the particular vales [sic.] of the first, second, and third coordinate to retrieve a selected pointer held by the selected entry when the particular location of the two-dimensional representation is selected; and

(See, Wistendahl, col. 6, lines 34-39, cited above.

computer readable program code for causing the digital processor to utilize a retrieved selected pointer to access hot program actions associated with the particular location in the two-dimensional image.

(See, Wistendahl, col. 6, lines 34-39, cited above.)

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a) Lipscomb, et al. (U.S. Patent 6,230,167 B1) teaching a method for associating specified program actions with locations in images viewed on a computer system, utilizing the image display coordinates and a third coordinate, and the use of a secondary image map.

b) Trower, II et al. (U.S. Patent 6,121,981) teaching interaction with an arbitrary shaped computer animation object.

c) Lathrop, et al. (U.S. Patent 5,096,427) teaching the projection of a three-dimensional computer object onto a two-dimensional display as old in the art at the time of the invention.

d) Doyle (U.S. Patent 4,847,604) teaching identifying predefined features of an image on a video display through the use of a pixel map and a color map to associate additional information to the image.

e) Hernandez, et al. (U.S. Patent 4,686,522) teaching combined graphic and text processing to invoke a dynamic object at the location of a cursor.

f) Miller, et al., The Virtual Museum: Interactive 3D Navigation of a Multimedia Database, The Journal of Visualization and Computer Animation, Vol. 3, pp.183-197, (1992), teaching interactivity with a 3-dimensional computer application.

g) Doyle, Michael D., New Method for Identifying Features of an Image on a Digital Video Display, Proceedings SPIE, Vol. 1380, Biostereometric Technology and Applications (1990), published April 1991, pp. 86-95.

Individuals associated with the filing or prosecution of a patent application are reminded of their obligations pursuant to 37 CFR 1.56. See generally, MPEP 2001 and subsections thereunder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael K. Botts whose telephone number is 571-272-5533. The examiner can normally be reached on Monday Thru Friday 8:00-4:00 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MKB

William L. Bashore
WILLIAM BASHORE
PRIMARY EXAMINER
10/12/2005